

Abstract of the Disclosure

A linear measuring device including a housing fastened to a first machine element and a scale within the housing, wherein the scale is fastened extending along the housing in a measuring direction. A scanning device for scanning a scale. A linear guide device including a guide rail, which is rigidly assigned to the housing; and a guide carriage, which is guided on the guide rail along the housing in the measuring direction, and includes a fastener to fasten the guide carriage rigidly on a second machine element. The housing is structured so that during measuring operations it is deflected perpendicular to the measuring direction, so that in the course of movement of the guide carriage in a direction perpendicular to the measuring direction the housing is taken along in the direction perpendicular to the measuring direction.